
SECTION 10265 - IMPACT-RESISTANT WALL PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Handrails.
 - 2. Corner guards.
- B. Related Sections include the following:
 - 1. Division 8 Section "Door Hardware" for stainless-steel mop, kick, and push plates.

1.3 SUBMITTALS

- A. Product Data: Include physical characteristics, such as durability, resistance to fading, and flame resistance, for each impact-resistant wall protection system component.
- B. Shop Drawings: Show locations, extent, and installation details of each impact-resistant wall protection system component. Show attachment to adjoining construction.
- C. Samples for Initial Selection: Manufacturer full range of covers and patterns available for each type of product indicated.
- D. Maintenance Data: For each impact-resistant wall protection system component to include in maintenance manuals specified in Division 1.
 - 1. Include recommended methods and frequency for maintaining optimum condition of vinyl plastic covers under anticipated traffic and use conditions. Include precautions against using cleaning materials and methods that may be detrimental to vinyl plastic finishes and performance.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed installation of impact-resistant wall protection system components similar in material, design, and extent to that indicated for this Project and whose



work has resulted in construction with a record of successful in-service performance.

- B. Manufacturer Qualifications: A firm experienced in manufacturing impact-resistant wall protection system components similar to those required for this Project and with a record of successful in-service performance.
- C. Source Limitations: Obtain each color, grade, finish, and type of impact-resistant wall protection system component from a single source with resources to provide components of consistent quality in appearance and physical properties.
- D. Product Options: Drawings indicate size, profiles, and dimensional requirements of impact-resistant wall protection system and are based on the specific system indicated. Other manufacturers systems with equal performance characteristics may be considered. Refer to Division 1 Section "Substitutions."
 - 1. Do not modify intended aesthetic effects.
- E. Fire-Test-Response Characteristics: Provide impact-resistant wall protection system components with the following surface-burning characteristics, as determined by testing materials identical to those required in this Section per ASTM E 84 by a testing and inspecting agency acceptable to authorities having jurisdiction. Identify impact-resistant wall protection system components with appropriate markings of applicable testing and inspecting agency.
 - 1. Flame Spread: 25 or less.
 - 2. Smoke Developed: 450 or less.
- F. Impact Strength: Provide impact-resistant wall protection system components with a minimum impact resistance of 25.4 ft-lbf/in. (1356 J/m) of width when tested according to ASTM D 256, Test Method A.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store wall surface-protection materials in original undamaged packages and containers inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.
 - 1. Maintain room temperature within the storage area at not less than 70 degrees F (21 degrees C) during the period plastic materials are stored. Keep sheet material out of direct sunlight to avoid surface distortion.
 - 2. Store rigid plastic corner-guard covers in a vertical position, and rigid plastic wall guard and handrail covers in a horizontal position for a minimum of 72 hours, or until the plastic material attains the minimum room temperature of 70 degrees F (21 degrees C).

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install wall surface-protection system components until the space is enclosed and weatherproof and ambient temperature within the building is maintained at not less than 70 degrees F (21 degrees C) for not less than 72 hours before beginning installation. Do not install rigid plastic wall surface-protection systems until that temperature has been attained and is stabilized.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Impact-Resistant Wall Protection System Units: Full-size units of maximum length, including vinyl plastic cover and aluminum retainer, equal to 2 percent of each type, color, and texture of each type of unit installed, but not less than two units.
 - a. Include accessory components as required. Replacement materials shall be from the same production run as materials installed. Package replacement materials with protective covering, identified with appropriate labels.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide impact-resistant wall protection system products by one of the following:
 - 1. American Floor Products Co., Inc.
 - 2. Arden Architectural Specialties, Inc.
 - 3. Balco, Inc.
 - 4. Construction Specialties, Inc.
 - 5. IPC Door and Wall Protection Systems, Inc.
 - 6. Koroseal Wall Protection Systems, Inc.
 - 7. Pawling Corporation.

2.2 MATERIALS

- A. Extruded Rigid Plastic: Textured, chemical- and stain-resistant, high-impact-resistant, PVC or acrylic-modified vinyl plastic; thickness as indicated; with a minimum impact resistance of 25.4 ft-lbf/in. (1356 J/m) of width when tested according to ASTM D 256, Test Method A.
 - 1. Color and Texture: As selected from manufacturer's full range.

- B. Aluminum Extrusions: Provide alloy and temper recommended by the manufacturer for the type of use and finish indicated, but with not less than the strength and durability properties specified in ASTM B 221 (ASTM B 221M) for alloy 6063-T5.
- C. Stainless-Steel Plate: Type 304, minimum 0.0625 inch (1.6 mm).
- D. Fasteners: Provide aluminum, nonmagnetic stainless-steel, or other non-corrosive metal screws, bolts, and other fasteners compatible with aluminum components, hardware, anchors, and other items being fastened. Use theft-proof fasteners where exposed to view.
- E. Adhesive: Heavy-duty type recommended by the manufacturer for use with material on the substrate indicated.

2.3 HANDRAILS

- A. Bumper-Rail-Type Handrails: Impact-resistant, resilient handrail assembly consisting of a snap-on plastic cover installed over a continuous aluminum retainer mounted at height indicated. Comply with ANSI/CABO A117.1.
 - 2. Cover: Extruded, rigid plastic, minimum 0.078 inch (2.0 mm) thick, in dimensions and profiles indicated.
 - 3. Retainer: Continuous, one-piece, extruded-aluminum retainer; minimum 0.081 inch (2 mm) thick; with continuous rubber or vinyl bumper cushion centered in the extrusion.
 - 4. Mounting Bracket: Extended mounting on high-impact, prefabricated, injection-molded, plastic mounting brackets. Provide mounting hardware and other accessories as required.
 - 4. Accessories: Provide prefabricated, injection-molded end caps and inside and outside corners with concealed splices, cushions, and other accessories as required.
 - a. End caps and inside and outside corners shall match plastic cover color and shall be field adjustable for close alignment with snap-on plastic covers.

2.4 CORNER GUARDS

- A. Fire-Rated, Resilient Plastic Corner Guards: Full-wall-height, resilient plastic corner-guard assembly consisting of a snap-on-type plastic cover installed over a continuous aluminum retainer and a continuous galvanized- or stainless-steel-covered intumescent fire barrier.
 - 1. Fire-Resistance Rating: Two hours according to UL where installed in fire-resistance-rated, metal-framed gypsum board partitions complying with requirements indicated as part of UL's fire-resistance rating.
 - 2. Cover: Extruded, rigid plastic, minimum 0.10 inch (2.5 mm) thick, in dimensions and profiles indicated.



- a. Corner Radius: 1-1/4 inches (32 mm).
 - 3. Retainer: Continuous, one-piece, extruded-aluminum retainer; minimum 0.109 inch (2.8 mm) thick; attached to a galvanized steel cover over manufacturer's standard intumescent fire barrier.
 - 4. Accessories: Provide aluminum base with concealed splices, cushions, mounting hardware, and other accessories as required.
- B. Stainless-Steel Corner Guards: Satin-finish, 0.0625-inch (1.6-mm) minimum, stainless-steel sheet corner guards; full wall height; with formed edges.
- 1. Wing Size: 3-1/2 by 3-1/2 inches (90 by 90 mm).
 - 2. Mounting Method: Heavy-duty adhesive.
 - 3. Corner Radius: 3/4 inch (20 mm) bullnose.

2.5 FABRICATION

- A. General: Fabricate impact-resistant wall and door protection systems to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including thickness of components.
- B. Fabricate components with tight seams and joints with exposed edges rolled. Provide surfaces free of wrinkles, chips, dents, uneven coloration, and other imperfections. Fabricate members and fittings to produce flush, smooth, and rigid hairline joints.
- C. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors for interconnecting members to other construction.
- D. Provide inserts and other anchoring devices for connecting components. Fabricate anchoring devices to withstand imposed loads. Coordinate anchoring devices with the supporting structure.

2.6 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.



2.7 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: non-specular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 607.1.

2.8 STAINLESS-STEEL FINISHES

- A. No. 4 satin finish. Remove tool and die marks and stretch lines or blend into finish.
 - 1. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions in which impact-resistant wall protection system components and impact-resistant wall covering materials will be installed.
 - 1. Complete finishing operations, including painting, before installing impact-resistant wall protection system components.
- B. Impact-Resistant Wall Covering Materials: Wall surfaces to receive impact-resistant wall covering materials shall be dry and free from dirt, grease, loose paint, and scale.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Before installation, clean substrate to remove dust, debris, and loose particles.

3.3 INSTALLATION

- A. Install impact-resistant wall protection system components level, plumb, and true to line without distortions.
 - 1. Do not use materials with chips, cracks, voids, stains, or other



defects that might be visible in the finished Work.

- B. Install aluminum retainers, mounting brackets, and other accessories according to the manufacturer's written instructions.
 - 1. Where splices occur in horizontal runs of more than 20 feet (6000 mm), splice aluminum retainers and plastic covers at different locations along the run.

3.4 CLEANING

- A. General: Immediately on completion of installation, clean plastic covers and accessories using a standard ammonia-based household cleaning agent. Clean metal components according to the manufacturer's written instructions.
- B. Remove excess adhesive using methods and materials recommended by the manufacturer.
- C. Remove surplus materials, rubbish, and debris, resulting from installation, on completion of work and leave installation areas in neat, clean condition.

END OF SECTION 10265

